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ABSTRACT

A study was conducted to develop strategies to increase placement rates in secondary and postsecondary vocational programs. During the study, researchers identified factors relating to job placement, provided descriptions of the educational and community processes appearing to influence job placement, and generated hypotheses concerning variables relating to job placement. Data for the study came from a variety of sources, including the following: literature reviews, interviews with 438 individuals involved in secondary vocational programs, mail questionnaires administered to 5,062 individuals representing people involved with secondary vocational education and 2,579 people who either received or provided vocational educational services. After analyzing these data, the researchers identified a number of labor market, community, and educational factors affecting the placement rates associated first with secondary and then with postsecondary vocational programs. Included among those factors found to have a significant influence on placement rates were the following: community unemployment rates, availability of transportation, types and sizes of industries in a community, demography, the pressure of cooperative vocational education programs, a high rate of participation in youth organizations, and the existence of a good relationship between schools and the community. Based on these findings, the researchers formulated a series of recommendations directed toward Congress, the U.S. Department of Education, state government agencies, teacher education institutions, postsecondary vocational educational institutions, and secondary schools. (MN)

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INCREASING JOB PLACEMENT RATES IN VOCATIONAL PROGRAMS:

SECONDARY AND POSTSECONDARY

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FOREWORD

Employment in a job related to training continues to be a widely accepted outcome of secondary and postsecondary vocational education programs. Even those persons who would view training-related job placement as a supplemental rather than a primary purpose of vocational education would not deny that job placement is an outcome that represents the expectations of many of those receiving, providing, and supporting vocational education.

Given the importance of job placement as an outcome for vocational education, it is logical to assume that policymakers and decision makers at all levels need information that would help them to better allocate limited resources toward the achievement of high rates of job placement for former vocational education students. As a result of this need the National Center conducted two exploratory studies designed to provide this type of information. The two studies resulted in the publication of the following two reports: "Factors Relating to the Job Placement of Former Secondary Vocational Education Students" (McKinney et al. 1981) and "Factors Relating to the Job Placement of Former Postsecondary Vocational-Technical Education Students" (McKinney et al. 1982). The findings provide a description of the education, labor market, and community factors that influence the placement of former secondary and postsecondary vocational education students in jobs related to their training. This report was designed to summarize the two publications identified above and make the information more broadly available. The original studies were sponsored by the Office of Vocational and Adult Education, U.S. Department of Education.

The National Center is grateful to the staff members who worked on the study. The project was conducted in the Evaluation and Policy Division under N. L. McCaslin, Associate Director. Floyd L. McKinney, Senior Research Specialist, served as Project Director. The project staff members were: Stephen J. Franchak, Senior Research Specialist; Ida Halasz, Janet Spirer, Pascal Forgione, Research Specialists; Joanne Farley, Irene Morrison, Mildred Quinn, and Patricia Fornash, Program Associates; Douglas McElwain, Elizabeth Kendall, Carolyn Taylor, and Beth Harvey, Graduate Research Associates; and Priscilla Ciulla and Sherry White, secretaries. Final editorial review of this report was provided by staff of the Editorial Services area of the National Center under the direction of Janet Kiplinger.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

EXECUTIVE SUMMARY

A major criterion for evaluating vocational education programs has been the number of former students placed in jobs related to the training they received. As policymakers and decision makers have attempted to achieve higher job placement rates, they have been frustrated by a lack of information about those factors that influence student job placement. The objectives of this study were to (1) identify factors relating to job placement, (2) provide detailed descriptions of the education and community processes appearing to influence job placement, and (3) generate hypotheses concerning variables relating to job placement.

Data for the secondary vocational education study came from several sources. These included a review of the literature; an analysis of the existing data from all fifty states and more specific data from 586 local education agencies in seven states; interviews with 438 individuals and observations in eight case-study sites in the seven states; and mail questionnaires from 5,062 individuals representing ten respondent groups (vocational education directors, principals, vocational education teachers, guidance counselors, job placement specialists, local advisory committee members, employers, current vocational education students, former vocational education students, and parents) in sixty-two local education agencies in the seven states.

Data for the postsecondary study came from a review of the literature, case studies, and mail questionnaires. The study was conducted in four states. The case studies were conducted in one postsecondary institution in each of the four states. Mail questionnaires were received from 2,599 individuals representing eight respondent groups (vocational-technical education deans/directors, vocational-technical education instructors, guidance counselors, job placement specialists, advisory committee members, employers, current vocational-technical education students, and former vocational-technical education students) in thirty-one postsecondary institutions in the four states.

Findings Related to Secondary Vocational Education

Three major factors were used to identify and organize the conditions that influence an individual's transition from a secondary vocational eduction program to a training-related job. These factors were: labor market, community, and education. Specific conditions found to be related to job placement of former secondary vocational education students in each of these three areas are listed below.

Labor Market Factors

Job placement rates are higher in those communities where—

- there are high employment rates.

In communities where there are low employment rates, there tend to be low job placement rates. Approximately 34 percent of the variance in placement rates of secondary vocational education students is accounted for by the employment rate in the particular community.

Community Factors

Job placement rates are higher in those communities where—

- transportation to jobs is available;
- there is a mix of industry sizes with proportionally more small industries than large ones;
- manufacturing is a major industry;
- the number of nonwhites is proportionally greater than in the population as a whole.

Education Factors

Job placement rates are higher in those school systems where—

- educators understand the importance of, are dedicated to, and are enthusiastic about placing students in jobs related to their training programs;
- teachers have regular contact with employers regarding the job placement of students;
- the job placement office provides coordination and includes teachers in job placement activities;
- student admission to vocational education programs is restricted to students with high interest and potential;
- cooperative vocational education programs place students in jobs related to their training program;
- students participate in youth organizations;
- frequent use is made of employer needs assessment surveys for planning and evaluating vocational education programs.

Findings Related to Postsecondary Vocational Education

The same three major factors—labor market, community, and education—were also used to identify and organize the conditions that influence an individual's transition from postsecondary vocational-technical education programs to a training related job. These specific conditions found to be related to job placement in each of these three areas are listed next.

Labor Market Factors

Job placement rates are higher in postsecondary institutions where—

- there is a high demand for workers in the surrounding labor area.

Community Factors

Job placement rates are higher in postsecondary institutions where—

- the community is supportive of vocational-technical education.

Education Factors

Job placement rates are higher in postsecondary institutions where—

- personnel are committed to and enthusiastic about the placement of students in training-related jobs as the major goal for the vocational-technical education program.
- administrators are committed to and encourage essential interactions that promote open communication among representatives of community organizations, labor, business, industry, and postsecondary institution personnel;
- instructors maintain frequent and meaningful contacts with the business and industrial community;
- the vocational-technical education curriculum is relevant and responsive to the needs of employers;
- job placement specialists and counselors serve as the initial source of information about job openings for instructors and students, provide both a clearinghouse function and a support function (secretarial assistance, telephone, job listing) for information about jobs;
- advisory committee input is used in planning vocational-technical education programs;
- planning is coordinated with community and state economic development activities, especially those activities related to labor supply and demand;
- job placement rates are used as a program evaluation criterion;
- program evaluation efforts are systematic and comprehensive.

Recommendations

Congress

To the Congress, the following is recommended:

- Recognize that vocational education programs operate with multiple goals in diverse settings, and therefore do not specify training-related placement and employer satisfaction as the only major criteria for the evaluation of such programs.

- Develop legislation that is flexible enough to allow state agencies to devise funding formulas that will encourage secondary schools and postsecondary institutions to conduct activities enhancing job placement.

U.S. Department of Education

To the U.S. Department of Education, the following is recommended:

- Encourage further research about the factors relating to job placement, especially in isolated areas, inner cities, areas with unique labor market, and areas in inaccessible locations.

- Encourage the dissemination of findings on the factors relating to job placement by funding symposia, workshops, monographs, and wide distribution of publications.

State Government Agencies

To state government agencies, the following is recommended:

- Use job placement rates in the formula to calculate the amount of an agency's entitlement if job placement is a major goal of the state agency.

- Develop specific plans for disseminating and utilizing findings from program evaluation.

- Clarify the philosophical position and goals for vocational education at secondary and postsecondary levels.

- Develop funding formulas that reward postsecondary institutions for implementing activities that enhance job placement.

- Provide teacher education institutions and postsecondary institutions with funding to conduct inservice education programs for teachers and administrators concerning those factors influencing job placement.

- Promote professional development activities that assist teachers in keeping up-to-date in their occupational skill areas.

Teacher Education Institutions

To teacher education institutions, the following is recommended:

- Provide graduate and inservice education programs designed for vocational education directors that create an understanding of the factors influencing the placement of former students in training-related jobs.

- Provide classes in program planning and evaluation skills to vocational educators for upgrading these areas.
- Provide teacher education programs and inservice education programs designed to impart to teachers an understanding of the vital role they play in job placement.
- Provide graduate education programs designed to prepare and upgrade school principals in working toward job placement as a goal for vocational education.

Postsecondary Institutions

To postsecondary institutions, the following is recommended:

- Develop clear statements of the goals for postsecondary vocational-technical education programs.
- Promote and reward enthusiasm for placing students in jobs related to training.
- Encourage frequent and active meetings of citizen advisory committees and utilize their recommendations in program planning and evaluation.
- Use job placement data as a major criterion for evaluating programs.
- Recognize the importance of instructors in the job placement process by including instructor performance in job placement as a criteria for tenure, promotion, and salary adjustments.
- Recognize the importance of the role played by chief administrators and deans/directors in the job placement process. Reward chief administrators and deans/directors for their leadership and allocation of resources to attain institutional goals for job placement.
- Develop and maintain systematic processes for ensuring that the vocational-technical education curriculum is relevant and responsive to the needs of business and industry.
- Develop and maintain current and relevant job placement information in a central location that is easily accessible to teachers, job placement specialists, counselors, administrators, and students.
- Provide instructors with clerical support to assist in maintaining contact with employers and in preparing recommendations for students.
- Use local labor market information in program planning and evaluation.
- Maintain close contact with other agencies involved in job development/job placement in the community.

Secondary Schools

To secondary schools, the following is recommended:

- Develop personnel policies and personnel development programs that reflect the importance of vocational education teachers having recent on-the-job experience in the occupations related to the area in which they are teaching.

- Develop goals for the vocational education program that are internalized and put into operation by all key actors.

- Develop more effective and efficient means to keep the vocational education curriculum updated.

- Involve business and industry personnel in planning, conducting, and evaluating vocational education programs.

- Provide inservice education programs for teachers and administrators so that they will have the skills needed to involve community members actively in advisory committees.

- Adopt teacher reward systems that reflect the important role teachers have in job placement.

- Use criteria to evaluate vocational education programs that reflect those processes that influence the placement of former students in training-related jobs. In addition to relevant job placement, program evaluations should be based on basic skill acquisition, continuation in school, and career exploration criteria.

INCREASING JOB PLACEMENT RATES

It is no secret that fundamental and far-reaching changes are affecting the U.S. labor market in new and stressful ways. Evidence of this stress can be seen in the chronic unemployment in this country, a problem especially acute among females, minorities, and lower socioeconomic class youth.

One response to this new employment environment was the emergence during the 1970s of a school-based, job placement movement. While this movement has a lengthy history, its ultimate goal has been to make school-based, job placement services available to all secondary and post-secondary students.

Another response has been fueled by a rising public concern that students who are trained and ready to enter the work world find appropriate jobs. With the passage of the Education Amendments of 1976 (P.L. 94-482), it was mandated that each state systematically evaluate its vocational education programs. At the same time, the legislation identified the primary, evaluative criterion to be the extent to which vocational-technical school completers and leavers find employment in occupations related to their training.

These trends reflect a new public awareness and sense of urgency. Together, along with other factors, they have focused the attention of educators, business and industry leaders, and government officials on the job placement of students trained in publicly supported institutions.

Traditionally, a host of agencies (federal and state, secondary and postsecondary) have collected information through follow-up studies. These were intended, in part, to find out how many vocational-technical education completers find employment in occupations related to their training. One major problem has been that the data obtained failed to show adequately what factors and processes significantly influence the job placements of this group. This lack of information hinders vocational-technical educators, policymakers, and decision makers in making recommendations to improve student placement and use of resources. This publication summarizes information from two more extensive studies* of factors affecting job placement of former secondary and postsecondary students conducted at the National Center for Research in Vocational Education.

Goals and Objectives

The overall goal of these studies was to produce knowledge for use in policymaking decisions to improve the job placement rates of vocational-technical education programs. The objectives of these studies were—

1. to identify factors relating positively or negatively to the placement of former vocational-technical education students in jobs related to their training;

*For a more detailed report the reader is referred to McKinney et al. 1981 and McKinney et al. 1982.

2. to provide a detailed description of the educational and community processes that appear to influence former vocational-technical education students being placed in jobs related to their training;

3. to generate hypotheses concerning variables relating to the placement of vocational-technical education students in jobs related to their training.

Dependent Variable

The dependent variable for these studies was the percentage of former students available for placement who were employed in a field related to their training.

Study Framework

In these studies, the job placement rate provided by local education agencies, state governing boards, and local postsecondary institutions was viewed as a measure of how effectively the vocational-technical education program within an institution was attaining its goal of placing students in training-related jobs after their exit from the program. This view of job placement focused attention upon issues and research questions concerning those educational factors intended to influence the outcome of job placement for these students. In addition, the educational factors are deemed especially important by policymakers and decision makers because such factors generally are processes or activities that can be manipulated.

Although emphasis in this approach focused on education factors, it was recognized that other types of factors affect youth and adult employment (e.g., labor market demand, minimum wage laws). Therefore, two other types of factors—labor market factors and community factors—were also included. The three major factors were used as an initial framework for identifying and organizing possible influences on job placement rates (see figure 1).

This conceptualization, in and of itself, did not provide clear direction as to what processes or activities are needed, required, or desirable to achieve high job placement rates. It did suggest, however, that different mixes of processes and activities in different contexts will result in variations in the outcome of training-related job placement.

Study Methodology

Four research approaches were used to conduct these studies: a literature review, case studies, mail questionnaires, and an analysis of existing data. The study approaches were deliberately chosen in order to view the problem of job placement from different perspectives. Because these were exploratory studies in which the main goal was to obtain valuable insights that ultimately may lead to testable hypotheses, an experimental research design was deemed inappropriate. A description of the secondary vocational education methodology can be found in appendix A. The postsecondary methodology is in appendix B. Complete copies of the mail questionnaires and the procedures used to analyze the data are provided by McKinney et al. (1981) and McKinney et al. (1982).

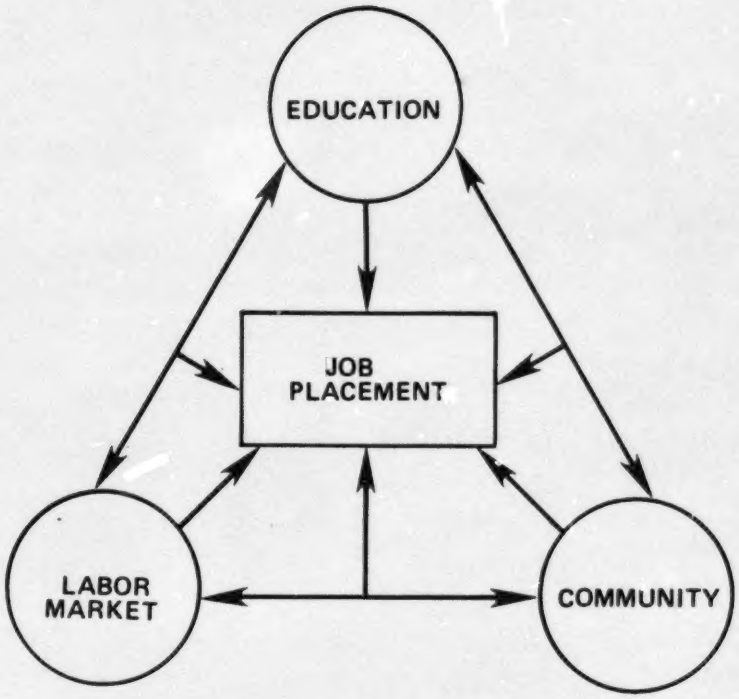

Figure 1. Heuristic framework for factors influencing job placement.

Findings

The study findings presented here are those that appear to have the greatest relevance for policymaking, decision making, and future research regarding the job placement of former secondary and postsecondary vocational-technical education students. These findings are categorized according to factors used by the study framework. Most attention is given to the educational factors because vocational-technical educators have a greater likelihood of bringing about change in this area as compared to changing labor market or community factors.

Education Factors (Secondary Level)

Higher rates of job placement exist in those secondary schools with the following characteristics.

ADMINISTRATORS, COUNSELORS, AND TEACHERS HAVE A CLEAR UNDERSTANDING THAT THE PRIMARY PURPOSE OF THE VOCATIONAL EDUCATION PROGRAMS IN THEIR SCHOOL SYSTEM IS THE PLACEMENT OF FORMER STUDENTS IN JOBS RELATED TO THEIR TRAINING

In the case studies, key interviewees at high- and low-placement sites understood the relative importance of job placement as one of the goals for vocational education programs. More administrators and vocational education teachers appeared to support job placement not only as a goal, but also in practice at high-placement sites. Superintendents and principals at high-placement sites appeared to have greater commitment to vocational education and to job placement as one goal of vocational education. As a teacher at a high-placement site noted, "When the school administrators support a goal, things start happening." The findings from the case studies indicated that positive philosophical positions toward vocational education programs tended to enhance support for placement as one of the goals of vocational education.

Evidence from the mail questionnaires suggested that the attitudes of vocational education directors were related to job placement. The ranking assigned by directors to the goal of placement in a training-related job, the creation of an awareness of different occupations, and placement in a job not necessarily related to training were all positively related to placement rates. Those results suggest that the goals a director holds for a program influence job placement rates.

ADMINISTRATORS, COUNSELORS, AND TEACHERS IN A SCHOOL SYSTEM ARE ALL COMMITTED TO THE PLACEMENT OF STUDENTS IN JOBS RELATED TO THEIR TRAINING AS THE PRIMARY PURPOSE OF VOCATIONAL EDUCATION

At high-placement sites, key administrators and vocational education teachers had a more positive regard for vocational education and subsequent job placement. This finding supports the work of Altman and Morrison (1966) and Meehan and Franchak (1975) who found that when school personnel are involved in the placement process, placement programs tend to be more effective. Gross and Herriot (1965) suggested that when administrators lend their active support and interest to a policy, staff members tend to work harder to achieve that policy's objectives. Investigators at Social, Education Research and Development, Inc. (1968) found that "good teacher-principal relations, with emphasis on the supportive role of supervision," was one element that helped to produce an effective vocational education program.

At the high-placement sites, more principals and vocational education teachers believed that teachers should have the major responsibility for job placement. Several teachers at high-placement sites indicated that they received support from the school administration and the community for their role in job placement. The responsibility for job placement at high-placement sites was spread among more school personnel.

PRINCIPALS ARE COMMITTED TO THE PLACEMENT OF FORMER VOCATIONAL EDUCATION STUDENTS IN JOBS RELATED TO THEIR TRAINING PROGRAM

Several writers have stressed the importance of the administrator's role in the success of vocational education programs. Kaufman and Schaefer (1967) found that principals who are out of touch with the vocational education program can contribute to low-placement rates for students.

From the case studies, it was seen that positive attitudes of administrators, especially superintendents and principals, were essential at the school level for providing philosophical and financial support to vocational education and job placement. Vocational education directors spent more time on job placement activities at high-placement sites than did their counterparts at low-placement sites.

THERE IS A HIGH LEVEL OF STAFF ENTHUSIASM FOR JOB PLACEMENT

At the high-placement case study sites, regardless of the presence of a placement office, more resources were provided to students, such as teachers' time and opportunity to contact employers, the posting of job opportunities, and the collection of information regarding occupations in the local area.

At the high-placement sites, school staff members were more involved and more enthusiastic about their participation in job placement efforts. It also appeared that more emphasis was given to job placement by all members of the staff at high-placement sites.

HIGHER RATES OF JOB PLACEMENT EXIST WHEN TEACHERS BELIEVE THEY HAVE A GREAT DEAL OF RESPONSIBILITY FOR PLACING STUDENTS IN JOBS RELATED TO THEIR TRAINING

The consensus among interviewees was, as one school administrator stated, "Teachers are the key to placement." Interviewees credited teachers, more than any other school personnel, with placing former students in jobs related to their training. Most teachers, especially those at high-placement sites, believed, as one teacher stated, "Placement is my responsibility." At high-placement sites, vocational teachers were more actively involved in job placement and had a greater sense of identification with their role in the placement process.

Teachers described their job placement responsibility as including the teaching of job-seeking skills, maintaining communication with employers in the community, and recommending students to employers. Information from the mail questionnaires indicated that more teachers at high-placement sites than at low-placement sites spent some time each week conducting job placement activities.

TEACHERS HAVE REGULAR CONTACT WITH EMPLOYERS REGARDING THE JOB PLACEMENT OF STUDENTS

Case study interviewees frequently noted that personal contacts made by teachers with businesses increased the opportunities for job placement. As one state director of vocational education said, "Contacts between teachers and businesses serve to establish a sense of mutual faith and trust between the employer and the school."

In response to the mail questionnaires, 59 percent of the vocational education teachers from high-placement sites indicated that they contacted businesses

regarding job placement of students. Teachers at high-placement sites indicated that they contacted employers regarding placement of students more frequently than did the teachers at low-placement sites.

THE JOB PLACEMENT OFFICE PROVIDES COORDINATION FOR AND INCLUDES TEACHERS IN JOB-PLACEMENT ACTIVITIES

Teachers at both high- and low-placement sites believed placement would be increased if their school had a placement office serving as a central clearinghouse to gather and disseminate information and provide clerical assistance. The study findings showed that the responsibility for placement was spread among more school personnel at high-placement sites. Involvement by school personnel in the placement process increased their opportunities to exchange information and ideas and to discuss problems regarding students and the vocational education program. One job placement officer at a high placement site indicated the importance of involving teachers in the job-placement activities by stating that ". . . the placement office would be ineffective without teacher involvement." Teacher involvement plays an important role in the effective matching of students and jobs, particularly since the placement service personnel may have less frequent and less intense contact with the students than do other school personnel, specifically the vocational teacher and the guidance counselor.

STUDENT ADMISSION TO VOCATIONAL EDUCATION PROGRAMS IS RESTRICTED TO STUDENTS WITH HIGH INTEREST AND HIGH POTENTIAL

At a high-placement site a counselor explained that

> all ninth grade students are given GATB, and I discuss students' aptitudes with them to decide what kind of training [they should] go into. Students at this vocational school are accepted for programs on the basis of their records. The better students are the ones that get to enroll in vocational programs.

At another site an administrator stated that "fundamentally, if we have good placement into the program, we have good placement out of the program." A counselor provided an example of how a rigorous selection process enhances placement. The counselor said, "Welding has the highest placement because we can pick the best of the many students who want to be in the program." Counselors were regarded as having a major role in admission of students to the vocational education programs.

COOPERATIVE VOCATIONAL EDUCATION PROGRAMS PLACE STUDENTS IN JOBS RELATED TO THEIR TRAINING PROGRAMS

The majority of case study interviewees were positive regarding the effectiveness of cooperative work programs and felt that they had a positive effect upon job placement. Most parents, teachers, current students, former students, employers, and administrators were also supportive of the cooperative education program at

their sites. As one parent explained, "The work experience gained by my son in the cooperative program will enhance his job placement opportunities." The majority of the parents indicated that their children learned a lot about the adult working world in the cooperative education program.

Employers frequently discussed the benefit that participation in cooperative education offered their businesses. One employer said that "kids work hard and learn a lot" and do a good job for him. Another mentioned that cooperative work placement provides him with an opportunity to size up prospective employees before hiring them for full-time employment.

FREQUENT USE IS MADE OF NEEDS ASSESSMENT SURVEYS FOR PLANNING AND EVALUATING VOCATIONAL EDUCATION PROGRAMS

At the high-placement case study sites, community needs assessment surveys were used more frequently than at the low-placement case study sites.

Approximately one-half of the employers who responded to the mail questionnaires indicated that they were contacted by the school personnel regarding skill competencies needed by their industries. The most frequent sources of information for program planning were needs assessments, state-level planning data, teacher input and student interest. According to the individuals responding to the mail questionnaires, needs assessments were frequently used for revision of curriculum, with the predominant input for revision coming from advisory committee members.

THE VOCATIONAL EDUCATION CURRICULUM IS ORIENTED TO THE NEEDS OF EMPLOYERS

A theme that emerged from the literature review was the need for vocational educators to work closely with employers and other community representatives in the planning of vocational education programs.

The vocational education curriculum was reviewed and updated more frequently at high-placement case study sites than at low-placement case study sites. Advisory committee members at high placement sites reported that they assisted vocational education staff in identifying job tasks and skills performed by workers. It appeared that when advisory committee members were knowledgeable about the types of skills required for entry-level employment and when their knowledge was actively sought by school administrators, placement rates were influenced positively. A high-placement site director of vocational education stated that, "Teachers are responsible for keeping abreast of changes in industry work requirements. They adjust their curricula accordingly."

When responding to the mail questionnaires, vocational education directors indicated that advisory committee members determine skills to be taught more often at high-placement sites than at low-placement sites.

THE RACIAL BALANCE OF THE SCHOOL STAFF RESEMBLES THAT OF THE COMMUNITY SERVED

From the response to the mail questionnaires, it was apparent that the racial balance of school personnel at high-placement sites ciosely reflected the racial balance of the community.

STUDENTS PARTICIPATE IN YOUTH ORGANIZATIONS

According to several authors (Bottoms 1980; Reel 1980), participation in youth organization provides an integral and highly beneficial component of the vocational education process. Former students responding to the mail questionnaires from the high-placement sites reported more participation in youth organizations. Almost a third of the students at high-placement sites belonged to Vocational Industrial Clubs of America (VICA). Membership in Future Farmers of America (FFA) and Future Homemakers of America/Home Economics Related Occupations (HERO) was also about one-seventh greater at high-placement sites. The frequency of participation in youth organizations was also greater at high-placement sites. The percentage enrolled in youth organizations was positively related to placement rates for all service areas, indicating that as the percentage of members in youth organizations increased, the placement rate increased.

Former students frequently attributed their employment achievements to the training they had received as youth organization members. This training included participation in public speaking, activities involving parliamentary procedure, and employability skill contests.

Labor Market Factors (Secondary Level)

Higher rates of job placement exists in those secondary schools with the following characteristics.

THERE IS A HIGH DEMAND FOR WORKERS IN SURROUNDING LABOR MARKETS.

Labor market conditions over which vocational educators have no control are at least as important as the nature of vocational education itself in determining job placement. The percentage of unemployment in communities with low placement was significantly higher than in communities with high job placement. There was a significant, negative relationship between the labor market unemployment rate and related job placement in the analysis of existing data at the sixty-two study sites.

Labor market demand also emerged as an important factor in job placement in the analysis of the responses to the mail questionnaires. This was congruent with the assertions of the case study interviewees, that job placement rates and labor market demands are negatviely related. "The more jobs there are in the community, the more placement there is from the schools," was frequently expressed by interviewees at the case study sites. Most interviewees at the case study sites

emphatically pointed out that the major deterrent to high job placement was the lack of entry-level jobs in the local community. One interviewee's remark summarized those of others, "There must be jobs if there is to be higher placement!" Additional evidence to support this finding was Eninger's (1968) Project Metro study which showed that the most common reason for former students obtaining jobs unrelated to their training was the lack of vacancies for related jobs.

TRANSPORTATION TO JOBS IS AVAILABLE

Lack of transportation emerged as a significant barrier to employment according to the mail questionnaire respondents. All the respondent groups were asked to rate the amount of difficulty that lack of transportation posed to vocational education graduates who were trying to obtain jobs. The results suggest that at sites where transportation is rated as posing relatively more difficulty in job placement, placement rates are lower.

This finding is supported by a study by Borus et al. (1980). In the National Longitudinal Survey (NLS), which had a representative sample of 12,693 youth, age fourteen to twenty-one, the lack of adequate transportation and the mismatch in the location of jobs and workers were found to be major barriers. Moreover, the NLS results showed that lack of transportation is cited as an impediment to getting a good job by 30 percent of youth, including 43 percent of black males.

THERE IS A MIX OF INDUSTRY SIZES WITH PROPORTIONALLY MORE SMALL INDUSTRIES THAN LARGE ONES IN THE AREA SERVED BY THE SCHOOL

Analysis of the existing data indicated that the job placement rates were positively correlated with sites having a proportionally greater number of smaller industries. Large industries were defined as having more than 250 employees. This finding was further corroborated by the respondents at the sixty-two mail questionnaire sites.

MANUFACTURING IS A MAJOR INDUSTRY IN THE COMMUNITY IN WHICH THE SCHOOL IS LOCATED

From existing data that provided socioeconomic information on the case study site, manufacturing was found to be the major industry in the high placement communities.

Community Factors (Secondary Level)

Higher rates of job placement exist in those secondary schools with the following characteristics.

THE SCHOOL IS LOCATED IN A COMMUNITY WITH A GREATER PROPORTION OF NONWHITES THAN IS FOUND IN THE POPULATION AS A WHOLE

The ethnic makeup of the eight case study site communities indicated a trend toward a higher concentration of minorities at the high-placement sites. The analysis of existing data further indicated a trend toward a positive relationship between the rate of training-related placement and communities with more nonwhites in the population. Student placement in training-related jobs is higher in communities with greater concentrations of minorities in the population.

Education Factors (Postsecondary Level)

Higher rates of job placement exist in those postsecondary institutions with the following characteristics.

PERSONNEL ARE COMMITTED TO THE PLACEMENT OF STUDENTS IN A JOB RELATED TO TRAINING AS THE MAJOR GOAL FOR THE VOCATIONAL-TECHNICAL EDUCATION PROGRAM

At the highest-placement case study site, job placement appeared to be the highest priority goal of the individuals interviewed. The majority of those interviewed agreed that the ultimate goal of the area's postsecondary institution was to place students in jobs related to their training. The instructors also recognized that job placement was one of their responsibilities.

The respondents to the mail questionnaires indicated their second priority for vocational-technical education was to place students, as they leave school, in jobs related to their training. Their primary goal was to provide students with the competencies needed to obtain a job.

Sites with higher placement rates were more likely to have respondents to the mail questionnaire who gave a higher ranking to the goal of placing students in a training-related job.

Findings from the case study and the mail questionnaires revealed that positive philosophical positions regarding job placement are critical for high placement. At the postsecondary institutions with relatively high placement rates, the commitment of administrators, faculty, and other staff to job placement as one important goal of their vocational-technical program was evident. The commitment was also apparent in the level of resources allocated to promote job placement activities at the institution. At the sites with highest placement, teachers' promotions were affected by their record of job placement.

The results of the mail questionnaire indicated that if school staff believe a primary goal of vocational education is placement in a training-related job, there is likely to be a higher percentage of job placement in training-related fields.

PERSONNEL ARE ENTHUSIASTIC ABOUT THE PLACEMENT OF STUDENTS IN A JOB RELATED TO THEIR TRAINING AS THE MAJOR GOAL FOR THE VOCATIONAL-TECHNICAL EDUCATION PROGRAM

At the postsecondary institutions with relatively high job placement rates, the commitment of administrators, faculty, and other staff to job placement as one important goal of their vocational-technical education program was evident. Throughout the study, it was clear that the most significant factor in the level of job placement at postsecondary institutions was the underlying philosophical position of administrators, the individual faculty members who did much of the actual job placement, and the other staff members who provided essential support and information services.

Instructors at the case study site with the highest job placement rate stated that they actively pursued job placement for their students. Several instructors reported that they carefully screen students they refer to employers so that "square pegs are not placed in round holes." The findings from the case studies indicate that the level of job placement strongly relates to instructors' belief that it is their responsibility to place students in jobs related to their training.

ADMINISTRATORS ARE COMMITTED TO AND ENCOURAGE ESSENTIAL INTERACTIONS THAT PROMOTE OPEN COMMUNICATION AMONG REPRESENTATIVES OF COMMUNITY ORGANIZATIONS, LABOR, BUSINESS, INDUSTRY, AND POSTSECONDARY INSTITUTION PERSONNEL

In a landmark study, Burt (1967) stated, "It is the quality of school leadership which is decisive in determining the nature and extent of industry cooperation." A good relationship between the vocational-technical institution and business and industry existed at the case study site with the highest job placement rate. The mission statement of the postsecondary institution may have had some impact on the good relationship. It is set forth in the faculty handbook as follows:

It is the intent that the vocational-technical program shall concern itself with the welfare and interest of the people of the area and shall maintain close ties with those segments of activity contributing to an increase in the quality of life and economic development of the area.

The level of communication about job placement between institution and labor market representatives was higher and more consistent at high-placement sites.

INSTRUCTORS MAINTAIN FREQUENT AND MEANINGFUL CONTACTS WITH THE BUSINESS AND INDUSTRIAL COMMUNITY

The literature indicates that one of the most effective, formal means of obtaining the necessary cooperation between industry and education has been through advisory committees. Studies conducted throughout the past three decades show that vocational-technical instructors provide more realistic meaningful education when assisted by advisory groups.

Responses to the mail questionnaires indicated that placement of students in jobs related to their training was enhanced when postsecondary institution personnel maintained consistent contact with business and industry personnel. At high-placement sites, instructors maintained ongoing communication with employers and job placement specialists and administrators.

THE VOCATIONAL-TECHNICAL EDUCATION CURRICULUM IS RELEVANT AND RESPONSIVE TO THE NEEDS OF EMPLOYERS

Rall and O'Brien (1977) found that collection of data about students and the local labor market has become essential for comprehensive program planning and for meeting the requirements of the law. When a new curriculum is being considered, it is necessary to consult with representative employers in order to be reasonably certain that jobs will become available. Reviews of national, regional, and state manpower projects may indicate broad trends, but more exact, local data are needed. At sites where advisory committee input and other labor market information was used as a basis for curriculum change, the placement rates were higher.

JOB PLACEMENT SPECIALISTS AND COUNSELORS SERVE AS THE INITIAL SOURCE OF INFORMATION FOR INSTRUCTORS AND STUDENTS ABOUT JOB OPENINGS, PROVIDE A CLEARINGHOUSE FUNCTION AND A SUPPORT FUNCTION (SECRETARIAL ASSISTANCE, TELEPHONE, JOB LISTING) FOR INFORMATION ABOUT JOBS

An important finding from the study regarding the job placement process was that a well-organized effort, often coordinated by a job placement specialist who had the cooperation of faculty and administration, was necessary for high job placement. At the case study site with the highest job placement rate, the job service counselor viewed the role of providing job options to students as most important. The counselor's duties included (1) receiving job openings from employers who contact the school or from the state employment service (SES) job bank, (2) informing instructors and students of the openings, (3) matching students to jobs and arranging job interviews, (4) conducting small group workshops on job-seeking skills with students, (5) conducting public relations activities with employers concerning the school, and (6) posting part-time job openings for students who desire part-time work while attending school. In addition, the counselor provided labor market information to the staff.

ADVISORY COMMITTEE INPUT IS USED IN PLANNING VOCATIONAL-TECHNICAL EDUCATION PROGRAMS

The Education Amendments of 1976 (P.L. 94-482) require consultation with a local advisory committee when planning programs for vocational education. Administrators and instructors at high placement sites made more frequent use of advisory committees in program planning. At the case study site, with the highest rate of job placement, it was apparent that the advisory committee was directly involved in the planning of all vocational-technical education programs. Without the recommendation of the advisory committee, no new programs or changes within an existing program were considered.

The quality of the advisory committees' involvement emerged as a critical factor in the case study findings. Where institutions had a high job placement rate, the advisory committee meetings were focused more specifically on substantive issues concerned with program planning. At high-placement sites, meetings with advisory committee members were productive and members' input was recorded and incorporated by school staff in planning and decision making.

PLANNING IS COORDINATED WITH COMMUNITY AND STATE ECONOMIC DEVELOPMENT ACTIVITIES ESPECIALLY THOSE ACTIVITIES RELATED TO LABOR SUPPLY AND DEMAND

It appeared that program planning at high-placement sites was focused more clearly upon the needs of employers and the emerging trends in the labor market. Postsecondary institutions with high job placement rates worked closely with business and industry leaders. It was apparent that the postsecondary institution staff in high-placement sites more clearly understood the role of the postsecondary institution in economic development and worked more closely with business/industry leaders in program planning.

At high-placement sites, employers regarded the postsecondary institution as highly responsive, eager to plan and participate in economic development and skill upgrading of current and potential employees. Additionally, job placement was enhanced by strong ties with employment services and a high level of cooperation with economic developers in the community.

JOB PLACEMENT RATES ARE USED AS A PROGRAM EVALUATION CRITERION

At the case study site with the highest rate of job placement, program evaluation criterion was explicitly related to the job placement rate. Although other criteria regarding the quality of the programs were considered at sites with the highest of placement rates, these rates were clearly important for the evaluation of the vocational-technical education programs.

PROGRAM EVALUATION EFFORTS ARE SYSTEMATIC AND COMPREHENSIVE

Evaluations at high-placement sites were used to recommend program improvements in order to maintain or enhance the job placement rates.

There was found to be a strong, positive relationship between high job placement rates and two factors: (1) the use of job placement rates as an evaluation criterion and (2) follow-through on evaluation recommendations for program improvement.

Labor Market Factor (Postsecondary Level)

Higher rates of job placement exist in those postsecondary institutions with the following characteristics:

THERE IS A HIGH DEMAND FOR WORKERS IN THE SURROUNDING LABOR MARKET

The majority of the interviewees at the case study sites emphasized that the most important factor in job placement was the rate of employment in the community. A frequent explanation was "if you've got jobs, you'll have high job placement." However, the statistical analysis revealed no significant relationship between labor force employment and job placement in a training-related field.

Community Factor (Postsecondary Level)

Higher rates of job placement exist in those postsecondary institutions with the following characteristics:

THE COMMUNITY IS SUPPORTIVE OF VOCATIONAL-TECHNICAL EDUCATION

Most of the graduates of the highest job placement case study site, which was the only two-year, public postsecondary school in the community, found jobs. The community strongly supported vocational-technical education, as was evidenced by public expressions of the value of the program and by the allocation of tax dollars.

Recommendations

The study recommendations are directed toward agencies or policymaking groups that have historically developed and/or enforced policies and decisions regarding vocational-technical education programs. Policymakers and decision makers interested in optimizing the placement of former secondary and postsecondary vocational-technical education students should give careful attention to the following recommendations. All of these recommendations deal with education factors over which vocational-technical educators have some control. Labor market and community characteristics associated with high rates of job placement, on the other hand, are beyond the control of vocational-technical educators. The recommendations were derived from project staff analysis of the study conclusions, juxtaposed with project staff knowledge of current situations in vocational-technical education.

Congress

To the Congress, the following is recommended:

- Recognize that vocational education programs operate with multiple goals in diverse settings, and therefore do not specify training-related placement and employer satisfaction as the only major criteria for the evaluation of such programs.

- Develop legislation that is flexible enough to allow state agencies to devise funding formulas that will encourage secondary schools and postsecondary institutions to conduct activities enhancing job placement.

U.S. Department of Education

To the U.S. Department of Education, the following is recommended:

- Encourage further research about the factors relating to job placement, especially in isolated areas, inner cities, and areas with unique labor market or geographic locations.

- Encourage the dissemination of findings on the factors relating to job placement by funding symposia, workshops, monographs, and wide distribution of publications.

State Government Agencies

To state government agencies, the following is recommended:

- Use job placement rates in the formula to calculate the amount of an agency's entitlement if job placement is a major goal of the state agency.

- Develop specific plans for disseminating and utilizating findings from program evaluation.

- Clarify the philosophical position and goals for vocational education by level.

- Develop funding formulas that reward postsecondary institutions for implementing activities that enhance job placement.

- Provide teacher education institutions and postsecondary institutions with funding to conduct inservice education programs for teachers and administrators concerning those factors influencing job placement.

- Promote professional development activities that assist teachers in keeping up-to-date in their occupational skill areas.

Teacher Education Institutions

To teacher education institutions, the following is recommended:

- Provide graduate and inservice education programs designed for vocational education directors that create an understanding of the factors influencing the placement of former students in training-related jobs.

- Provide classes in program planning and evaluation skills to vocational educators for upgrading these areas.
- Provide teacher education programs and inservice education programs designed to impart to teachers an understanding of the vital role they play in job placement.
- Provide graduate education programs designed to prepare and upgrade school principals in working toward job placement as a goal for vocational education.

Postsecondary Institutions

To postsecondary institutions, the following are recommended:

- Develop clear statements of the goals for postsecondary vocational-technical education programs.
- Promote and reward enthusiasm for placing students in jobs related to training.
- Encourage frequent and active meetings of citizen advisory committees and utilize their recommendations in program planning and evaluation.
- Use job placement data as a major criterion for evaluating programs.
- Recognize the importance of instructors in the job placement process by including instructor performance in job placement as a criteria for tenure, promotion, and salary adjustments.
- Recognize the importance of the role played by chief administrators and deans/directors in the job placement process. Reward chief administrators and deans/directors for their leadership and allocation of resources to attain institutional goals for job placement.
- Develop and maintain systematic processes for ensuring that the vocational-technical education curriculum is relevant and responsive to the needs of business and industry.
- Provide classes in program planning and evaluation skills to vocational educators for upgrading these areas.
- Provide teacher education programs and inservice education programs designed to impart to teachers an understanding of the vital role they play in job placement.
- Provide graduate education programs designed to prepare and upgrade school principals in working toward job placement as a goal for vocational education.

Secondary Schools

To secondary schools, the following is recommended:

- Develop personnel policies and personnel development programs that reflect the importance of vocational education teachers having recent on-the-job experience in the occupations related to the area in which they are teaching.

- Develop goals for the vocational education program that are internalized and put into effect by all key actors.

- Develop more effective and efficient means to keep the vocational education curriculum updated.

- Involve business and industry personnel in planning, conducting, and evaluating vocational education programs.

- Provide inservice education programs for teachers and administrators so that they will have the skill needed to involve community members actively in advisory committees.

- Adopt teacher reward systems that reflect the important role teachers have in job placement.

- Use criteria to evaluate vocational education programs that reflect those processes appearing to influence the placement of former students in training-related jobs. In addition to relevant job placement, program evaluations should be based on basic skill acquisition, continuation in school, and career exploration criteria.

Suggestions for Additional Research

Numerous questions arose as the project staff planned and conducted the study. The broad and complex concerns surrounding efforts by secondary and postsecondary institutions to ensure students' placement in training-related jobs need further investigation. It may not be feasible to replicate the data on which this report is based. However, several aspects need to be studied in greater depth.

The following questions are presented as suggestions for additional research:

- How could placement in training-related jobs be maximized by adopting or adapting procedures related to:

  - administration practices;

  - business, industry, and labor linkages;

  - counseling practices;

  - operation of job placement offices;

  - student participation in cooperative education programs;

  - the recruitment and selection of students.

- Is placement in a training-related job an appropriate goal for vocational education programs? Most of the programs studied had multiple goals.

- What are the effects of changing economic conditions on placement in a training-related job? What differences in program practices are necessitated by a chronically depressed labor market compared to a temporarily depressed labor market?

APPENDIX A

Secondary Vocational Education Study

The first sampling stage in the study of factors relating to the placement of secondary vocational students involved the initial selection of states to participate in the studies. Judgment sampling was used to select seven states to be included in the study. The criteria used in making the judgment samples were—

- the presence of an operating management information system in the state;
- the willingness of states to participate in the study;
- a geographic distribution of states roughly approximating the major geographical regions of the United States; and
- consideration of project constraints such as level of funds, staff, and time.

The second sampling stage involved the selection of local education agencies (LEAs). LEAs offering vocational education programs in at least five different occupational fields were selected to participate. Out of a total of 1,476 LEAs in the seven states, 586 met this criterion. The 586 education agencies were then stratified on the basis of three major variables, each having two levels: (1) average job placement rate of the LEA,* (2) labor market demand,** and (3) community type.***

In the third stage of sampling, 72 LEAs were randomly selected from the 586 to receive the mail questionnaires. Of these 72 LEAs, 62 agreed to participate.

The fourth sampling stage consisted of selecting the individuals to receive the mail questionnaires. Based upon the literature review and meetings with external project consultants, ten groups of respondents were identified: local vocational education directors, principals of secondary schools, vocational education teachers, guidance counselors, job placement specialists, local advisory committee members, local employers, current vocational education students, former vocational education students, and parents. Questionnaires were mailed to a total of 20,307 individuals at the sixty-two participating sites. The return rate was 25 percent.

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*A percentage of 54.3 and above was considered high, and below 54.3 percent was considered low as established by a median split for the 586 job placement rates.

**High labor market demand was defined as having unemployment rates of 5.9 percent and below. Low labor market demand was defined as having unemployment rates of 6.0 percent and above.

***Metropolitan communities were defined as located in a Standard Metropolitan Statistical Area (SMSA) and nonmetropolitan as not located in an SMSA.

A judgment sampling technique was also used in selecting the eight case study sites. An equal split of sites with high- and low-placement rates was made. Four vocational schools and four comprehensive high schools were included in the study. All individuals contacted were promised confidentiality regarding the identification of participating states, local education agencies, and responding individuals in all sites. At the eight case study sites, a total of 438 individuals were interviewed.

APPENDIX B

Postsecondary Vocational-Technical Education Study

The first sampling stage involved the initial selection of states to participate in the studies. Judgment sampling was used to select four states to be included in the study. The criteria used were—

- the presence of an operating management information system in the state;
- the willingness of states to participate in the study;
- a geographic distribution of states; and
- a strong statewide commitment for providing postsecondary vocational-technical education programs.

The second sampling stage involved the selection of postsecondary institutions. The population from which institutions were selected to participate was composed of postsecondary institutions offering vocational-technical education programs in at least five different occupational fields as defined by the six-digit USDE code. The institutions in each of the four states were then stratified on the basis of two major variables: (1) high- or low-placement rate* and (2) high or low labor market demand.**

In the third stage of sampling, thirty-two postsecondary institutions were randomly selected to receive the mail questionnaires. One of the mail questionnaire sites withdrew from the study at a time when it was too late to select another site.

The fourth sampling stage consisted of selecting the individuals to receive the mail questionnaires. Based upon the literature review of and meetings with external project consultants, eight groups of respondents were identified: vocational-technical education deans/directors, vocational-technical education teachers, vocational-technical education guidance counselors, job placement specialists, advisory committee members, employers, current vocational-technical education students, and former vocational-technical education students. Questionnaires were mailed to 10,983 individuals, and a 24 percent return was received.

A judgment sampling technique was also used in selecting the four case study sites. Two of the postsecondary institutions selected were very large and complex institutions. One of the postsecondary sites was in a small rural setting and another was located in the inner city. Three of the

*Sites were identified as high or low, based on a median split of job placement rates for postsecondary institutions in a state.

**High labor market demand was defined as having unemployment rates of 5.9 percent and below. Low labor market demand was defined as having unemployment rates of 6.0 percent and above.

institutions were community colleges and one was a postsecondary technical school. All individuals contacted were promised confidentiality regarding the identification of participating states, local education agencies, and responding individuals in all sites. At the four case study sites, a total of 261 individuals were interviewed.

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